```
EEEEEEEEEEEEEEE  DDDDDDDDDDD     TTTTTTTTTTTTTTT
EEEEEEEEEEEEEEE  DDDDDDDDDDDD    TTTTTTTTTTTTTTT
EEEEEEEEEEEEEEE  DDDDDDDDDDDD    TTTTTTTTTTTTTTT
EEE              DDD         DDD      TTT
EEE              DDD          DDD     TTT
EEE              DDD          DDD     TTT
EEE              DDD          DDD     TTT
EEE              DDD          DDD     TTT
EEE              DDD          DDD     TTT
EEEEEEEEEEEE     DDD          DDD     TTT
EEEEEEEEEEEE     DDD          DDD     TTT
EEEEEEEEEEEE     DDD          DDD     TTT
EEE              DDD          DDD     TTT
EEE              DDD          DDD     TTT
EEE              DDD          DDD     TTT
EEE              DDD          DDD     TTT
EEE              DDD          DDD     TTT
EEE              DDD          DDD     TTT
EEEEEEEEEEEEEEE  DDDDDDDDDDD         TTT
EEEEEEEEEEEEEEE  DDDDDDDDDDDD        TTT
EEEEEEEEEEEEEEE  DDDDDDDDDDDD        TTT
```

FILEID**LNONCTG

N 4

```
LL          NN      NN    OOOOOO    NN      NN    CCCCCCCC  TTTTTTTTTT    GGGGGGGG
LL          NN      NN    OOOOOO    NN      NN    CCCCCCCC  TTTTTTTTTT    GGGGGGGG
LL          NN      NN  OO      OO  NN      NN  CC              TT      GG
LL          NN      NN  OO      OO  NN      NN  CC              TT      GG
LL          NNNN    NN  OO      OO  NNNN    NN  CC              TT      GG
LL          NNNN    NN  OO      OO  NNNN    NN  CC              TT      GG
LL          NN  NN  NN  OO      OO  NN  NN  NN  CC              TT      GG
LL          NN  NN  NN  OO      OO  NN  NN  NN  CC              TT      GG  GGGGGG
LL          NN    NNNN  OO      OO  NN    NNNN  CC              TT      GG  GGGGGG
LL          NN    NNNN  OO      OO  NN    NNNN  CC              TT      GG      GG
LL          NN      NN  OO      OO  NN      NN  CC              TT      GG      GG
LLLLLLLLLL  NN      NN    OOOOOO    NN      NN    CCCCCCCC      TT        GGGGGG
LLLLLLLLLL  NN      NN    OOOOOO    NN      NN    CCCCCCCC      TT        GGGGGG

LL            IIIIII      SSSSSSSS
LL            IIIIII      SSSSSSSS
LL              II      SS
LL              II      SS
LL              II      SS
LL              II      SS
LL              II        SSSSSS
LL              II        SSSSSS
LL              II              SS
LL              II              SS
LL              II              SS
LL              II              SS
LLLLLLLLLL    IIIIII    SSSSSSSS
LLLLLLLLLL    IIIIII    SSSSSSSS
```

```
;    1          0001  0 %TITLE 'EDT$LNONCTG - test for non-contiguous range'
;    2          0002  0 MODULE EDT$LNONCTG (                            ! Test for non-contiguous range
;    3          0003  0                     IDENT = 'V04-000'           ! File: LNONCTG.BLI Edit: JBS1004
;    4          0004  0                     ) =
;    5          0005  1 BEGIN
;    6          0006  1 !
;    7          0007  1 !*****************************************************************************
;    8          0008  1 !*                                                                           *
;    9          0009  1 !*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                                  *
;   10          0010  1 !*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.                    *
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;   14          0014  1 !*  ONLY IN  ACCORDANCE WITH  THE  TERMS  OF  SUCH  LICENSE  AND WITH THE    *
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;   16          0016  1 !*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY     *
;   17          0017  1 !*  OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY     *
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;   19          0019  1 !*                                                                           *
;   20          0020  1 !*  THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE     *
;   21          0021  1 !*  AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT     *
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;   23          0023  1 !*                                                                           *
;   24          0024  1 !*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS     *
;   25          0025  1 !*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                   *
;   26          0026  1 !*                                                                           *
;   27          0027  1 !*                                                                           *
;   28          0028  1 !*****************************************************************************
;   29          0029  1 !
;   30          0030  1
;   31          0031  1 !++
;   32          0032  1 ! FACILITY:     EDT -- The DEC Standard Editor
;   33          0033  1 !
;   34          0034  1 ! ABSTRACT:
;   35          0035  1 !
;   36          0036  1 !       Test for a non-contiguous range.
;   37          0037  1 !
;   38          0038  1 ! ENVIRONMENT:  Runs at any access mode - AST reentrant
;   39          0039  1 !
;   40          0040  1 ! AUTHOR: Bob Kushlis, CREATION DATE: February 3, 1978
;   41          0041  1 !
;   42          0042  1 ! MODIFIED BY:
;   43          0043  1 !
;   44          0044  1 ! 1-001 - Original.  DJS 10-MAR-81.  This module was created by
;   45          0045  1 !       extracting the routine EDT$$TST_NONCNTGRNG  from EXEC.BLI.
;   46          0046  1 ! 1-002 - Regularize headers.  JBS 20-Mar-1981
;   47          0047  1 ! 1-003 - Use new message codes.  JBS 04-Aug-1981
;   48          0048  1 ! 1-004 - Improve the appearance of the listing.  JBS 14-Jun-1983
;   49          0049  1 !--
;   50          0050  1
```

```
;    52          0051  1 %SBTTL 'Declarations'
;    53          0052  1 !
;    54          0053  1 ! TABLE OF CONTENTS:
;    55          0054  1 !
;    56          0055  1
;    57          0056  1 REQUIRE 'EDTSRC:TRAROUNAM';
;    58          0495  1
;    59          0496  1 FORWARD ROUTINE
;    60          0497  1     EDT$$TST_NONCNTGRNG;
;    61          0498  1
;    62          0499  1 !
;    63          0500  1 ! INCLUDE FILES:
;    64          0501  1 !
;    65          0502  1
;    66          0503  1 REQUIRE 'EDTSRC:EDTREQ';
;    67          0638  1
;    68          0639  1 !
;    69          0640  1 ! MACROS:
;    70          0641  1 !
;    71          0642  1 !       NONE
;    72          0643  1 !
;    73          0644  1 ! EQUATED SYMBOLS:
;    74          0645  1 !
;    75          0646  1 !       NONE
;    76          0647  1 !
;    77          0648  1 ! OWN STORAGE:
;    78          0649  1 !
;    79          0650  1 !       NONE
;    80          0651  1 !
;    81          0652  1 ! EXTERNAL REFERENCES:
;    82          0653  1 !
;    83          0654  1 !       In the routine
```

```
;    85          0655  1 %SBTTL 'EDT$$TST_NONCNTGRNG  - test for non-contiguous range'
;    86          0656  1
;    87          0657  1 GLOBAL ROUTINE EDT$$TST_NONCNTGRNG (                ! Test for non-contiguous range
;    88          0658  1     RANGE                                           ! The range to test
;    89          0659  1     ) =
;    90          0660  1
;    91          0661  1 !++
;    92          0662  1 ! FUNCTIONAL DESCRIPTION:
;    93          0663  1 !
;    94          0664  1 !       This routine takes a range node and determines whether or not it
;    95          0665  1 !       defines a contiguous range.  The range is non-contiguous if it is
;    96          0666  1 !       a ALL or if the next range field is non-zero, indicating and AND.
;    97          0667  1 !
;    98          0668  1 ! FORMAL PARAMETERS:
;    99          0669  1 !
;   100          0670  1 !  RANGE                The range to test
;   101          0671  1 !
;   102          0672  1 ! IMPLICIT INPUTS:
;   103          0673  1 !
;   104          0674  1 !       NONE
;   105          0675  1 !
;   106          0676  1 ! IMPLICIT OUTPUTS:
;   107          0677  1 !
;   108          0678  1 !       NONE
;   109          0679  1 !
;   110          0680  1 ! ROUTINE VALUE:
;   111          0681  1 !
;   112          0682  1 !       0 = range is contiguous, 1 = range is non-contiguous
;   113          0683  1 !
;   114          0684  1 ! SIDE EFFECTS:
;   115          0685  1 !
;   116          0686  1 !       Prints a message if the range is non-contiguous.
;   117          0687  1 !       Calls itself recursively if the range refers to a buffer.
;   118          0688  1 !
;   119          0689  1 !--
;   120          0690  1
;   121          0691  2     BEGIN
;   122          0692  2
;   123          0693  2     EXTERNAL ROUTINE
;   124          0694  2         EDT$$FMT_MSG;
;   125          0695  2
;   126          0696  2     MESSAGES ((RANNONCON));
;   127          0697  2
;   128          0698  2     MAP
;   129          0699  2         RANGE : REF NODE_BLOCK;
;   130          0700  2
;   131          0701  3     IF ((.RANGE [RAN_TYPE] EQL RAN_ALL) OR (.RANGE [NEXT_RANGE] NEQ 0))
;   132          0702  3     THEN
;   133          0703  3         BEGIN
;   134          0704  3         EDT$$FMT_MSG (EDT$_RANNONCON);
;   135          0705  3         RETURN (T);
;   136          0706  3         END
;   137          0707  2     ELSE
;   138          0708  2 !+
;   139          0709  2 ! If is is a buffer range, we better look at the range below it.
;   140          0710  2 !-
;   141          0711  2
```

```
;  142      0712  3          IF (.RANGE [RAN_TYPE] EQL RAN_BUFFER)
;  143      0713  2          THEN
;  144      0714  3              RETURN (EDT$$TST_NONCNTGRNG (.RANGE [RANGE1]))
;  145      0715  2          ELSE
;  146      0716  2              RETURN (0);
;  147      0717  2
;  148      0718  1      END;                                        ! of routine EDT$$TST_NONCNTGRNG

                                                              .TITLE  EDT$LNONCTG EDT$LNONCTG - test for non-contiguo
;                                                                             us range
                                                              .IDENT  \V04-000\

                                                              .EXTRN  EDT$$FMT_MSG, EDT$_RANNONCON

                                                              .PSECT  _EDT$CODE,NOWRT,  SHR,  PIC,2

                                          0004 00000          .ENTRY  EDT$$TST_NONCNTGRNG, Save R2          ; 0657
                      52        04    AC   D0 00002           MOVL    RANGE, R2                             ; 0701
                      13        01    A2   91 00006           CMPB    1(R2), #19                            ;
                                      05   13 0000A           BEQL    1$                                    ;
                                10    A2   D5 0000C           TSTL    16(R2)                                ;
                                      11   13 0000F           BEQL    2$                                    ;
                           00000000G  8F   DD 00011  1$:      PUSHL   #EDT$_RANNONCON                       ; 0704
             00000000G  00            01   FB 00017           CALLS   #1, EDT$$FMT_MSG                      ;
                        50            01   D0 0001E           MOVL    #1, R0                                ; 0712
                                      04   00021              RET                                           ;
                        0D      01    A2   91 00022  2$:      CMPB    1(R2), #13                            ;
                                      08   12 00026           BNEQ    3$                                    ;
                                04    A2   DD 00028           PUSHL   4(R2)                                 ; 0714
                   D1   AF            01   FB 0002B           CALLS   #1, EDT$$TST_NONCNTGRNG               ;
                                      04   0002F              RET                                           ;
                                      50   D4 00030  3$:      CLRL    R0                                    ; 0716
                                      04   00032              RET                                           ; 0718

; Routine Size:  51 bytes,    Routine Base:  _EDT$CODE + 0000


;  149      0719  1
;  150      0720  1 !<BLF/PAGE>
```

```
;  152          0721  1 END                                               ! of module EDT$LNONCTG
;  153          0722  1
;  154          0723  0 ELUDOM
```

```
;                              PSECT SUMMARY
;
;       Name                  Bytes                      Attributes
;
;   _EDT$CODE                     51  NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)
```

```
;                           Library Statistics
;
;                                        -------- Symbols --------      Pages       Processing
;       File                             Total    Loaded  Percent      Mapped      Time
;
;  _$255$DUA28:[EDT.SRC]EDT.L32;1         377       52       13          40        00:00.2
;  _$255$DUA28:[EDT.SRC]PSECTS.L32;1        2        1       50           7        00:00.1
```

```
;                              COMMAND QUALIFIERS
;
;       BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACEBACK/LIS=LIS$:LNONCTG/OBJ=OBJ$:LNONCTG MSRC$:LNONCTG.BLI/UPDATE=(ENH$:LNONCTG
;       )

; Size:          51 code + 0 data bytes
; Run Time:         00:10.0
; Elapsed Time:     00:13.2
; Lines/CPU Min:      4333
; Lexemes/CPU-Min: 12953
; Memory Used:  68 pages
; Compilation Complete
```